# Undescribed Species of Eriocera and Penthoptera from Tropical America (Tipulidae, Diptera).

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The new species described in this paper were collected by E. B. and J. H. Williamson and W. H. Ditzler, in Venezuela, and by J. H. Williamson in Peru. Through the kindness of the collectors, the author has been permitted to retain the types in his collection.

## Eriocera longipennis sp. n.

Antennae short in both sexes; general coloration reddish fulvous; wings long and narrow, brown; stigma very small; abdomen and legs dark brown.

&.—Length 9.5 mm.; wing 15.5 mm. Rostrum brown, the palpi dark brown. Antennae short, dark brown. Head fulvous, the anterior part of the vertex more suffused with brown.

Mesonotum reddish fulvous, the praescutum with a narrow and indistinct brown line. Pleura brownish fulvous, the dorso-pleural membrane dark brown. Halteres dark brown, the base of the stem paler. Legs with the coxac and trochanters testaceous; remainder of the legs black, the bases of the femora paler. Wings long and narrow, strongly tinged with brown; stigma very small, faintly indicated, dark brown; veins dark brown. Venation: Sc extending a short distance beyond the fork of Rs, Sc2 about opposite the fork of Rs; Rs very long, much longer than R4+5; basal deflection of the latter very short; cell M1 lacking; veins issuing from cell 1st M2 long and slender; basal deflection of Cu1 just beyond the fork of M; Cu2 a little shorter than the basal deflection of Cu1; cell 2nd A very narrow; anal angle lacking.

Abdomen dark brown, the hypopygium a little brighter.

Habitat.—Venezuela. Holotype, & Macuto, January 29, 1920 (Williamson).

It is possible that *Eriocera longipennis* may more properly be considered a species of *Penthoptera*.

#### Eriocera dimidiata sp. n.

Antennae short in both sexes; general coloration black, the mesonotal scutellum and postnotum reddish; pleura reddish, marked with black; wings with a strong brownish suffusion.

8.—Length 10 mm.; wing 13 mm. ♀.—Length 12 mm.; wing 11.6 mm.

Rostrum and palpi dark brown. Antennae short in both sexes, black. Head brownish black, the occiput more brownish; vertical tubercle very conspicuous, each lateral angle produced into a conical knob.

Mesonotal praescutum and scutum black, the scutellum and postnotum abruptly reddish. Pleura reddish, the dorso-pleural membrane and a spot on the mesepisternum dark brown. Halteres dark brown. Legs entirely black, including the coxae. Wings with a strong brown suffusion, darkest in the costal and subcostal cells; basal and anal cells slightly paler medially; veins dark brown. Venation: Cell M1 lacking; cell 1st M2 irregularly pentagonal; basal deflection of Cu1 beyond the fork of M, longer than Cu2.

Abdomen black.

Habitat.—Venezuela. Holotype, & Tachira, Tachira, April 8, 1920 (J. H. and E. B. Williamson and W. H. Ditzler). Allotopotype, ♀, April 11, 1920. Paratopotype, ℰ, April 4, 1920.

The paratype is in the collection of the University of Michigan.

Er'ocera perenensis sp. n.

General coloration yellow; mesonotal praescutum with four conspicuous dark brown stripes; a conspicuous basal pit on mesonotal postnotum; wings faintly tinged with brown, the stigma only faintly darker; abdomen with a broad black subterminal ring.

&.—Length 15 mm.; wing 13.3 mm. Rostrum brown; palpi black. Antennae short; scape obscure yellow; remainder of antennae brownish black, the base of the first flagellar segment pale. Head obscure yellow; vertical tubercle inconspicuous, dorsally with two rows of black setae; a small shiny cicatrice on antero-lateral portion of tubercle.

Pronotum brown, blackened laterally. Mesonotal praescutum with four conspicuous, dark brown stripes, the median pair but narrowly separated; scutum yellow, the lobes largely dark brown; scutellum testaceous medially, dark laterally; postnotum obscure yellow, darker posteriorly; on either side between the median and lateral sclerites at base a large, conspicuous, circular pit. Pleura yellow, the dorso-pleural region narrowly dark brown. Halteres dark brown, the base of the stem conspicuously yellow. Legs with the coxae pale, the base narrowly and indistinctly darkened; trochanters obscure yellow; femora brownish yellow, the bases clearer, the apices darker brown; tibiae and tarsi dark brown.

Wings faintly tinged with brown; stigma and broad seams along the longitudinal veins indistinctly darker; veins dark brown. Venation: Sc2 close to tip of Sc1, the latter a little the longer; r on R2 less than its length beyond the fork and on R1 about three to four times its length from the tip, R1 being bent strongly caudad at r; deflection of R4+5 subequal to r-m; cell 1st M2 a little narrowed distally, m less than one-half the outer deflection of M3; cell M1 lacking; basal deflection of Cu1 just beyond the fork of M, Cu2 and the deflection of Cu1 subequal.

Abdomen with the first tergite brown basally; remainder of the abdomen yellow except a broad black subterminal ring which includes all of segments six and seven, and all of five except the narrow base.

Habitat.—Peru. Holotype, &, Colonia del Perené, Campamiento, June 5, 1920 (J. H. Williamson).

Eriocera perenensis is related to E. cornigera Alexander, differing in the lack of slender curved horns on the vertical tubercle and the details of coloration.

### Eriocera williamsoni sp. n.

General coloration dark brown, the ventral sclerites of the thorax and abdomen yellow; legs black; wings with a pale brown tinge, the stigma and indistinct seams along the cord pale brown; Sc comparatively short, Sc1 ending just beyond the fork of Rs; cell M1 lacking; cell 1st M2 very long and narrow.

8.—Length 9.8 mm.; wing 9.7 mm. Rostrum and palpi brownish black. Antennae with the first scapal segment brownish black; second segment brown; flagellum broken. Head blackish, gray pruinose; vertical tubercle inconspicuous.

. Mesonotum dark velvety brown, the praescutal stripes a trifle paler than the ground-color, the broad median stripe split by a capillary dark line. Dorsal pleurites dark brown, including the lateral sclerite of the postnotum; ventral pleurites and sternites yellow. Halteres relatively long and slender, the base broadly dark brown, the distal half of the stem paler brown; knobs dark brown. Legs with the coxae and trochanters obscure brownish yellow; remainder of the legs black, the femoral bases very little paler.

Wings with a pale brown tinge, more suffused in cells C and Sc and at the wing-tip; stigma and indistinct seams along the cord and outer end of cell Ist M2 slightly darker brown. Venation: Rs only a little longer than R; Sc comparatively short, Sc1 ending just beyond the fork of Rs, Sc2 a short distance before the fork; r on R2 about one and one-half times its length beyond the fork and on R1 about two and one-half times its length from the tip; R2 more than twice R2+3; deflection of R4+5 shorter than r-m; cell Ist M2 very long and narrow, rectangular, longer than any of the veins beyond it; cell M1 lacking; basal deflection of Cu1 at about two-fifths its length beyond the fork of M, longer than Cu2 alone.

Abdominal tergites dark brownish black, the base of tergite two paler; sternites obscure brownish yellow.

Habitat.—Peru. Holotype, & Colonia del Perené, Campamiento, June 6, 1920 (J. H. Williamson).

This interesting species is named in honor of the collector, Mr. Jesse H. Williamson, to whom I am indebted for several

interesting Neotropical Tipulidae. The fly much resembles a *Penthoptera* and it is probable that the two genera will need to be united, a course already followed by Mr. Edwards.

## Penthoptera candidipes sp. n.

Mesonotum reddish brown, unmarked; pleura yellow with a broad brownish, dorsal, longitudinal stripe; legs brown, the tarsi white; on the posterior legs, the metatarsi entirely white; wings with a yellowish tinge; distal section of R1 about three times r; r-m connecting with Rs at its tip, obliterating the basal deflection of R4+5.

Q.—Length 10.5 mm.; wing 10.3 mm. Rostrum and palpi brown. Antennal scape yellow, flagellum dark brown. Head dark brown,

sparsely gray pruinose.

Mesonotal praescutum reddish brown, without stripes, the extreme lateral margin narrowly yellowish; remainder of the mesonotum reddish brown, the postnotum more plumbeous. Pleura yellowish, the dorsal sclerites with a broad brownish longitudinal stripe. Halteres dark brown. Legs with the coxac and trochanters obscure yellow; remainder of the legs dark brown, the femoral bases indistinctly paler; terminal tarsal segments snowy white, on the fore and middle legs the white includes a little more than the distal half of the metatarsi; on the hind legs the metatarsi are entirely white; fore metatarsi much longer than the posterior metatarsi; fore metatarsi about three and one-half times the remaining tarsal segments; posterior metatarsi less than twice the remaining tarsal segments; inner apical angles of the tarsal segments slightly produced and armed with bristles, those of the metatarsi stronger than the others.

Wings with a yellowish tinge; stigma lacking; wing-tip indistinctly darkened; veins dark brown. Venation; Sc1 ending about opposite one-third the length of R2+3, Sc2 some distance from the tip of Sc1, the latter alone being longer than r-m; Rs long, strongly arcuated at origin; r on R2 a little more than its length beyond the fork of R2+3; distal section of R1 about three times r; deflection of R4+5 lacking, r-m connecting directly with the end of Rs; cell 1st M2 elongate-rectangular, a little shorter than vein M1+2 beyond it; cell M1 lacking; basal deflection of Cu1 a little more than one-half its length beyond the fork of M.

Abdominal tergites dark brown; sternites obscure yellow. Ovipositor with the basal shield obscure yellow; tergal valves reddish horn color, acicular.

Habitat.—Venezuela. Holotype, ♀, Tachira, Tachira, April 9, 1920 (J. H. and E. B. Williamson and W. H. Ditzler).

The only close ally of the present species is *Penthoptera* batesi Alexander of the Upper Amazons. The present species is readily told by the diagnostic characters as given above.